

# Project Management 2.0

## Leading and Managing Virtual Teams

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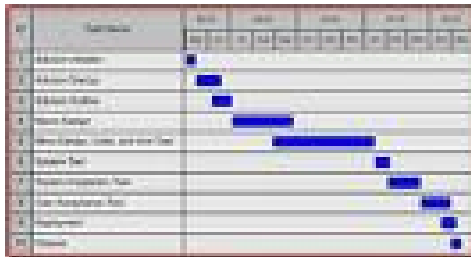


# Overview

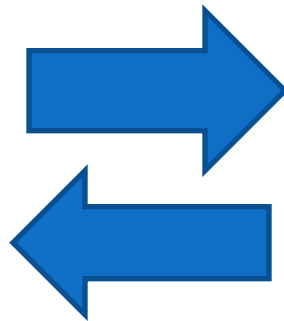
- What is **Project Management 2.0**?
- Example: The Dust Management Project
- How does Project Planning relate to collaborative management?
- How does Earned Value Management reporting relate?
- Dos and Don'ts for success

# What is Project Management 2.0

Project Management 2.0 is the evolution of project management to incorporate more “collaborative management”.



Strategy,  
Planning



Collaborative Management,  
Tracking  
and Reporting.

## Example: Dust Management Project

**30** Team Members, **8** Field Centers, **7** Sub-projects  
**mixed** employees/contractors, **zero** direct reports.



# Managing Virtually – The Challenge

**Virtual teams are difficult to manage:**

- Managing by influence, not authority
- Indirect reports
- Competing priorities
- “Out of sight, out of mind” syndrome

# BEFORE: How we Managed

WBS or Milestone ID	Milestone Title	Scheduled completion Date	Status
1.1	<b>Project Management</b>		
	Monthly report	Monthly 15th	Completed
1.2	<b>SE&amp;I</b>		
1.2-1	Refine Cradle Schema and Project Data		Completed
1.2-2*	Baseline R & T Portfolio to Requirements – update assessment	7/10/08	Completed
1.4	<b>Engineering Design Environment</b>		
1.4.1	Regolith Characterization		
RC-1	Physical Properties Downselect	5/30/08	Completed
RC-2	Physical Properties Prototyping		On schedule
RC-3*	Progress Report		On schedule
1.4.2	Environment Characterization		
1.4.2.1	Dusty Plasma Exosphere Modeling		
EC-1	Progress Report		On schedule
1.4.2.2	Best Practices for Avoidance		
	Dusty Plasma Electrical Measurements		
EC-2	Progress Report	5/30/08	On schedule

1. Planning  
by MS Project

2. Day-to-day Tasking  
by email

3. Tracking  
by Spreadsheet

4. Reporting  
by rollups

## **BEFORE: Inherent challenges**

- Too much to keep track
- Occasional “dropped balls”
- Reality different than planned
- In the dark about details
- No easy way to report

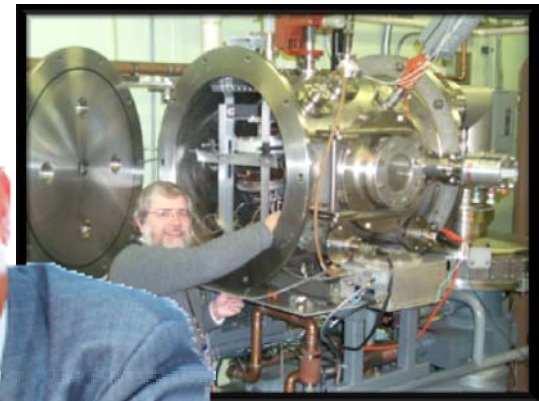




# The Solution – for the NASA Dust Management

## Project Management 2.0

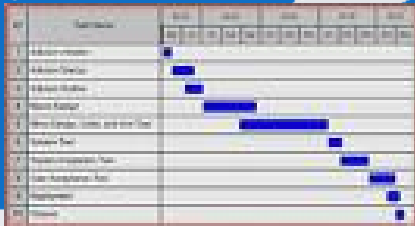
at [NasaTeam.com](http://NasaTeam.com) (based on TeamLeader™)  
an online workspace for managing virtually.





# Step 1 – We Consolidated Systems into one place – TeamLeader™

## MS Project Plan (baseline tasks)



## Milestone Spreadsheet

WBS or Milestone ID	Milestone Title	Scheduled completion Date	Status
1.1	Project Management		
1.1.1	Monthly report	Monthly, 15th	Completed
1.2	SE&I		
1.2-1	Refine Cradle Schema and Initial Project Data	1/30/08	Completed
1.2-2*	Baseline R & T Portfolio Mapped to Requirements - update pending T&M and project technical assessment	4/30/08	Completed
1.4	Engineering Design Environments		
1.4.1	Regolith Characterization		
RC-1	Physical Properties Downselect	5/30/08	Completed
RC-2	Physical Properties Protocols	9/30/08	On schedule
RC-3*	Progress Report	9/30/08	On schedule
1.4.2	Environment Characterization		
1.4.2.1	Dusty Plasma Envelope Modeling		
EC-1	Progress Report	9/30/08	On schedule
1.4.2.2	Best Practices for Avoidance of Dusty Plasma Electrical Hazards		
EC-2	Progress Report	9/30/08	On schedule

## TeamLeader™

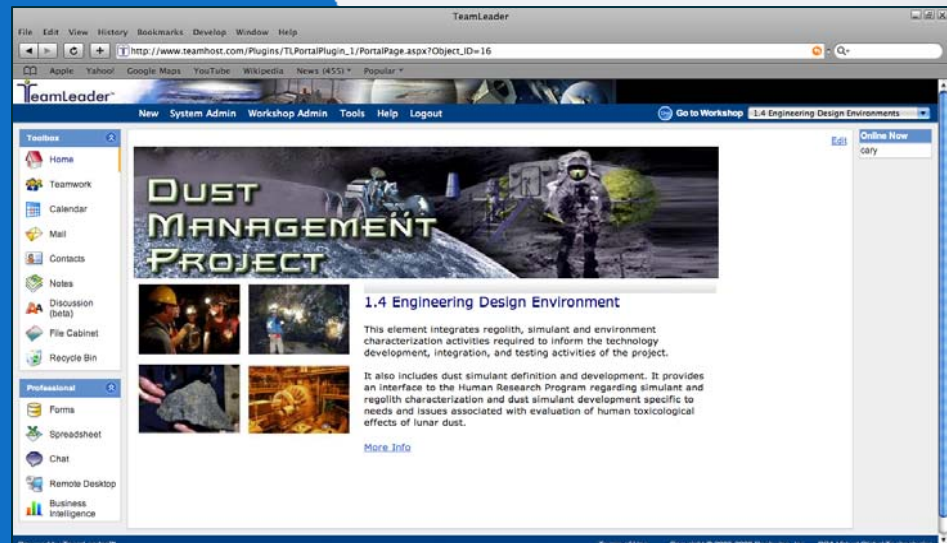
The screenshot shows the TeamLeader web application interface. The top navigation bar includes links for 'New', 'System Admin', 'Workshop Admin', 'Tools', 'Help', and 'Logout'. The main content area features a large banner for the 'DUST MANAGEMENT PROJECT' and a section titled '1.4 Engineering Design Environment'. This section describes the integration of regolith, simulant, and environment characterization activities. A sidebar on the left contains a 'Toolbox' with icons for Home, Teamwork, Calendar, Mail, Contacts, Notes, Discussion (beta), File Cabinet, Recycle Bin, Professional, Forms, Spreadsheet, Chat, Remote Desktop, and Business Intelligence. The bottom of the page includes a footer with 'Powered by TeamLeader™' and 'Powered by 2007, 2008 Microsoft, Inc. P&A Virtual Planet Technologies'.

## Files and Resources

Select	Info
<input type="checkbox"/>	<a href="#">Reportable dust milestones-Apr08status.doc</a>
<input type="checkbox"/>	<a href="#">0DUST MASTER SCHEDULE to IBR01-010-08 updated.MPP</a>
<input type="checkbox"/>	<a href="#">ETDP PY10 PPBE Dust 4 10 08 snp.xls</a>
<input type="checkbox"/>	<a href="#">Task 1.x.x.x Milestone Data.xls</a>
<input type="checkbox"/>	<a href="#">Task 1(1).5.1 Milestone Data FY09.xls</a>
<input type="checkbox"/>	<a href="#">SPARCLE Milestones FY10 Task.xls</a>
<input type="checkbox"/>	<a href="#">SPARCLE work sheet.xls</a>
<input type="checkbox"/>	<a href="#">DMP-TCR 072608.ppt</a>
<input type="checkbox"/>	<a href="#">DMP-TCR 072608.pdf</a>

## Step 2 – We Invited Team Members to participate, asking them to keep tasks updated.

**\*\*\* NOTE: Many collaboration implementations stop here, providing little for managers.**



## Step 3 – We Started Managing in the Dust Management System

Assign/reprioritize work, and track progress *on-the-fly*...



### Engineering Design Environments - Teams and Tasks

New Refresh Delete Complete Incomplete Reopen

Active  
Late Tasks  
Unviewed  
My requests  
Closed (Last 24 hours)  
Closed (Last 7 days)  
Closed (Last 30 days)

Cary Landis  
Mark Hyatt  
Ken Street  
1.4.1.1 Regolith & Simulant Characterization  
Bill Farrell  
1.4.2 Lunar Environment Characterization  
1.4.2.1 Dusty Plasma Exosphere Modeling  
1.4.2.1.1 Progress Report  
1.4.2.2 Best Practices for avoidance of Dusty Plasma Electric Hazards  
1.4.2.2.1 Progress Report  
Carole McLemore

Team Tasks

Show Settings

View type

Select	Title	Priority	Status	Due Date	Owner	Created
<input type="checkbox"/>	Physical Properties (PP) Protocols	High	Active	9/30/2008	Ken Street	5/20/2008
<input type="checkbox"/>	Report on progress to WBS 1.4.3	High	Active	9/30/2008	Ken Street	5/20/2008
<input type="checkbox"/>	Physical Properties (PP) Protocols/Report on progress to WBS 1.4.3	High	Active	10/7/2009	Ken Street	5/20/2008
<input type="checkbox"/>	Physical Properties (PP) Protocols/Report on progress to WBS 1.4.3	High	Active	10/8/2010	Ken Street	5/20/2008
<input type="checkbox"/>	Physical Properties (PP) Protocols/Report on progress to WBS 1.4.3	High	Active	10/6/2011	Ken Street	5/20/2008

...filter on who's doing what, what's late, and what's coming due.

# We implemented **auto-reminders**...

Sends auto-emails to team members with upcoming or late tasks.

Note: Previously mundane, but necessary, manager responsibility.

Instills  
**ACCOUNTABILITY.**

The screenshot displays the TeamLeader web application interface. At the top is a browser window with the address bar showing 'http://www.team...'. Below the browser is the TeamLeader logo and a navigation menu with links: New, System Admin, Workshop Admin, Tools, Help, and Logout. On the left is a 'Toolbox' sidebar with icons and links for Home, Teamwork, Calendar, Mail, Contacts, Notes, Discussion (beta), File Cabinet, and Recycle Bin. The main content area is titled 'Send Status Email'. It contains two sections: 'What to show:' and 'Who to Email:'. The 'What to show:' section has three checkboxes: 'All tasks more than' (checked), 'All tasks due within' (unchecked), and 'Tasks closed in the past' (unchecked). To the right of these are input fields for '1', '5', and '7' days, with labels 'days past', 'days or le', and 'days' respectively. Below these is a dropdown menu set to 'My Tasks' and an unchecked checkbox for 'All My Workshops'. The 'Who to Email:' section has three checkboxes: 'Notify Owner' (checked), 'Notify Me' (checked), and 'Notify Requestor' (unchecked). A 'Send' button is located at the bottom right of the form.



# Reports anytime we want them...

We know who's doing what, what's late, what's coming due...

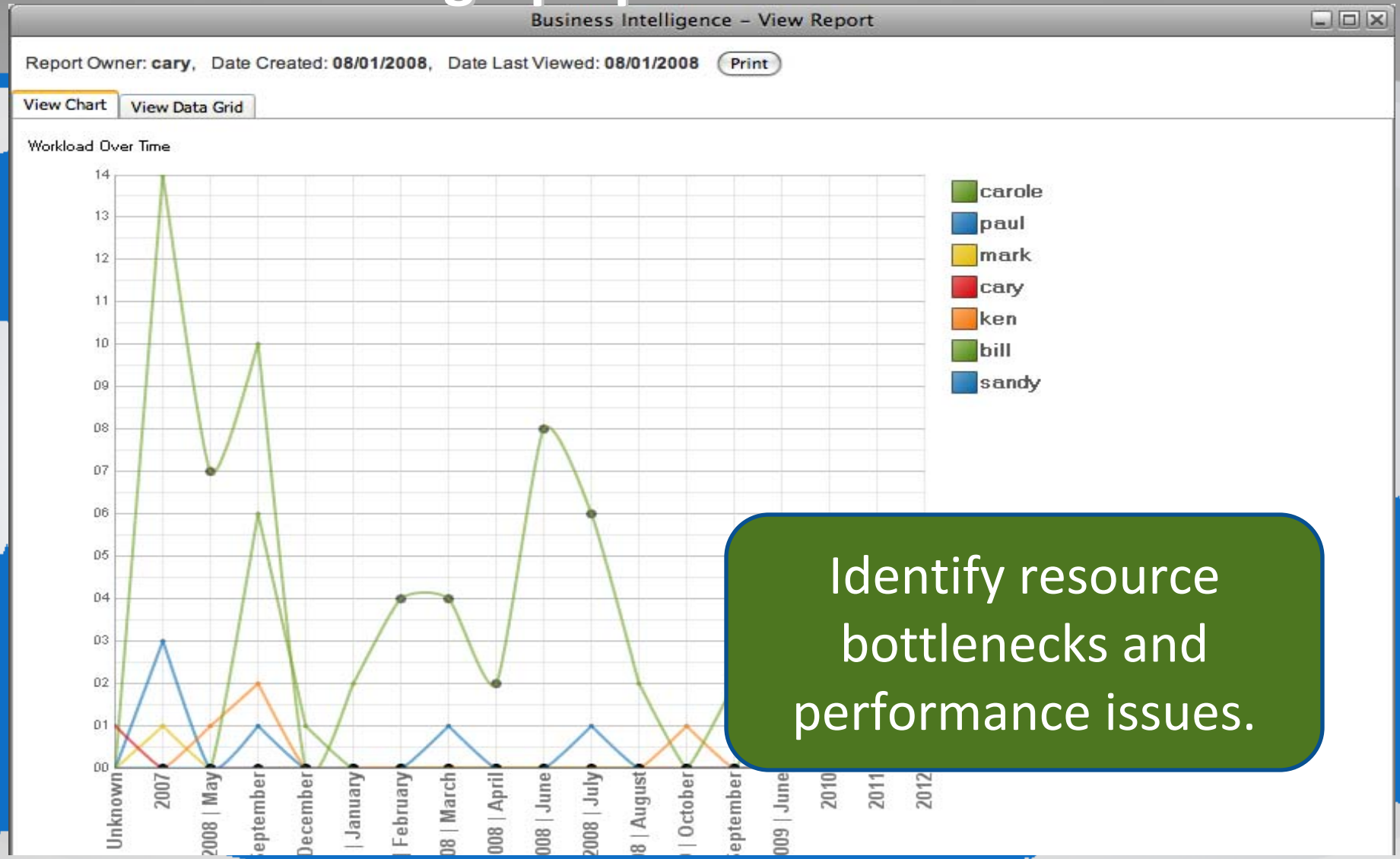
...due dates that changed, completed tasks, or custom reports.

The screenshot shows the TeamLeader web application interface. The browser address bar displays <http://www.teamhost.com/Reports/ReportViewer.aspx>. The application has a blue header with the 'TeamLeader' logo and navigation links: New, System Admin, Workshop Admin, Tools, Help, and Log. A left sidebar contains a 'Toolbox' with icons for Home, Teamwork, Calendar, Mail, Contacts, Notes, Discussion (beta), File Cabinet, and Recycle Bin. The main content area is titled 'Reports' and includes a 'Select a report:' dropdown menu, a 'Report Format:' section with checkboxes for 'All My Workshops' and 'Show comments', and a 'Task Owner:' field. Below these is a 'Go To: 1 of 3' navigation bar. The selected report is 'Who's Working On What', which displays the following information:

**User:** BILL  
**Workshop:** 1.4 Engineering Design Environments  
**Priority:** High

Task Title	% Complete	Due Date
Grain model	0	9/30/2008
Surface model/Shackleton region	0	9/30/2008
Triboelectrification/charge dissipation	0	9/30/2008
key parameters for environmental testing of hardware	0	9/30/2008
Identify needed measurements	0	9/30/2008
Identify instruments and techniques	0	9/30/2008

# We can graph performance trends



Identify resource  
bottlenecks and  
performance issues.



We can report on history.

Always know who did  
what and when.

The screenshot shows a web browser window titled "Task Details - Windows Internet Explorer" with the address bar displaying "http://www.teamhost.com/Plugins". The browser's menu bar includes "File", "Edit", "View", "Favorites", "Tools", and "Help". Below the menu bar is a toolbar with icons for "Save", "Assign", "Delete", "Flags", "Status", and "Exit". The main content area displays task information: "Owner: julianna", "Requestor: mark", "Start Date: 9/9/2008", and "Due Date: 11/7/2008". A "History" section is highlighted with a red border, showing a list of actions: "Created: mark, 5/19/2008 8:43 AM", "Created: mark, 5/19/2008 8:43 AM", "Viewed: julianna, 8/5/2008 4:38 PM", and "Due Changed: julianna, 8/5/2008 4:43:16 PM". Below the history section are tabs for "General", "Attachments (0)", and "Signatures". The "Title" field contains the text "Test Facilities Assessment Draft Report Complete".

Owner: julianna Requestor: mark

Start Date: 9/9/2008

Due Date: 11/7/2008

History:

- Created: mark, 5/19/2008 8:43 AM
- Created: mark, 5/19/2008 8:43 AM
- Viewed: julianna, 8/5/2008 4:38 PM
- Due Changed: julianna, 8/5/2008 4:43:16 PM

General Attachments (0) Signatures

Title: Test Facilities Assessment Draft Report Complete

Great for “what went wrong”  
analysis or assessing  
contractor performance.

# How NASA Managers benefit?

- ✓ Stay more in the loop
- ✓ No more “dropped balls”
- ✓ Improved accountability and productivity

And it has created a consolidated knowledgebase as team members work:

- ✓ Knowledge transfer (employee turnover)
- ✓ Historical reporting and analysis
- ✓ Reports anytime

# Frequent Questions – Challenges?

## Q. What are the challenges of collaborative management?

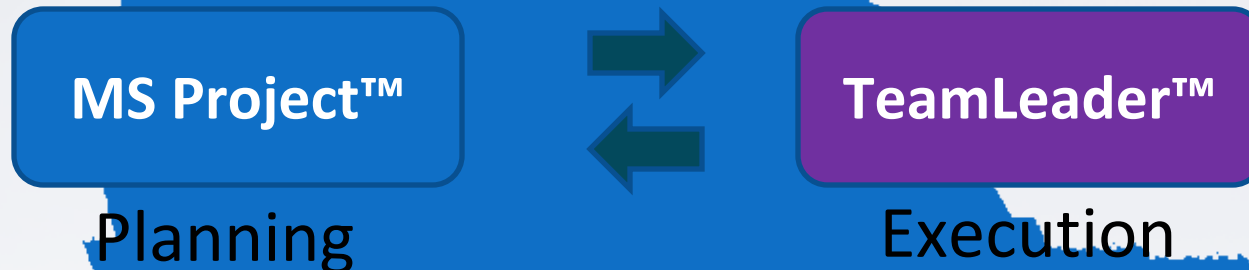
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- **Anxiety** - of “it’s an extra thing to do.”
- **Resistance to change** – a new way of doing things that requires breaking “management by email” habits.
- **Training** – Learning curve of new technology.

# Frequent Questions – Project Plan

Q. Does TeamLeader *replace* planning?

A . No, TeamLeader is used to EXECUTE the plan.



***“The best plan is only a plan, that is, good intentions, unless it degenerates into work.”***

**Peter Drucker**

# Frequent Questions – EVM

Q. How does EVM and collaborative management relate?

A. Project plan is planned value.  
TeamLeader is earned value.



MS Project™

What is planned

TeamLeader™

What is accomplished

# Lessons Learned: Dos and Don'ts

## Do:

1) Facilitate the change

- **Get past anxiety** of something new
- **Train and help with the change**

2) Engage Team members:

- **Turn on proactive email alerts**
- **Respond to reports –**

E.g. If something shows as complete,  
say “thanks”. If late, then follow up.

## Do NOT:

Fail to take advantage of collaborative management.



# Contact Mark Hyatt

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